

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

In the Matter of	)	
	)	
Amendment of the Commission's	)	GEN Docket No. 90-314
Rules to Establish New Personal	)	
Communications Services	)	

**UTAM REPORT TO THE FCC**

July 1, 2000

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UTAM, Inc. ("UTAM"), the frequency coordinator for the unlicensed personal communications service ("UPCS") band, herewith submits its eleventh report on implementation of the UTAM Plan for Financing and Managing 2 GHz Microwave Relocation.<sup>1</sup> As detailed below, UTAM continues to fulfill its obligations to make significant progress in clearing the UPCS band and facilitating the deployment of UPCS devices. The market for UPCS devices continues to expand as the number of deployed devices continues to grow with additional manufacturers entering the market and applications of wireless technology continue to penetrate all facets of business, education and health care. The procedures that UTAM has put in place to insure compliance with its charter continue to work well in managing the deployment of

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<sup>1</sup> UTAM Plan for Financing and Managing 2 GHz Microwave Relocation, GEN Docket No. 90-314 (filed Aug. 1, 1994) [hereinafter "UTAM Plan"]. On April 19, 1995, the Commission formally approved UTAM as the UPCS frequency coordinator. As part of its responsibilities, UTAM was charged with submitting biannual progress reports to update: (a) the financial and band-clearing plans; (b) projections of future band clearing; (c) the extent of incumbent microwave relocations; (d) the extent of UPCS device deployment; and (e) any difficulties encountered in implementing the UTAM Plan. Amendment of the Commission's Rules to Establish New Personal Communications Services, 10 FCC Rcd 7955 (1995) (Fourth Memorandum Opinion and Order).

unlicensed devices and protecting incumbent microwave operations from any interference. To date, no incidents of microwave interference have been encountered.

## I. EXECUTIVE SUMMARY

As noted in previous reports to the Commission, UTAM continues to meet the objectives established by the Commission in bringing UPCS systems to the public. Over the course of the reporting period, the processes and procedures put in place to allow the deployment of UPCS devices have continued to work well and continue to be adhered to by manufacturers of UPCS devices.<sup>2</sup> As in the past, UTAM will continue to monitor these processes and procedures and make any refinements deemed necessary.

Since UTAM filed its last report with the Commission in January, 2000, UTAM is pleased to report that the following tasks have been accomplished:

- ▶ UTAM has expanded the comprehensive cost sharing agreement reached with the PCIA Clearinghouse<sup>3</sup> and its members to include AT&T Wireless Systems. The expanded agreement continues to accelerate the UPCS clearing process by opening up a number of counties and major metropolitan areas to unencumbered deployment of UPCS devices.
- ▶ Consistent with its regional clearing strategy, having completed the Northeast, UTAM has been focusing on clearing the Southeast region and, as of this report, approximately 98% of the region is clear. The next region to be addressed will be the Midwest.
- ▶ Nationally, in the 1920 – 1930 MHz Isochronous band, UTAM has increased the number of counties available for unencumbered deployment

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<sup>2</sup> Under FCC rules, parties must execute a signed Subscriber Agreement with UTAM, receive UTAM certification and obtain FCC authorization before marketing or installing a UPCS product of device. See 47 C.F.R § 15.307.

<sup>3</sup> The PCIA Clearinghouse is one of two designated entities established by the FCC to track the relocation of microwave links that operate on the Licensed and Unlicensed PCS frequencies, to notify affected entities of such relocations, and to facilitate the sharing of microwave link relocation costs by such affected entities.

to 2,911, or 93% of the U.S. In the 1910 – 1920 MHz asynchronous band, 2,669 counties, or 85%, of the country is available for unencumbered deployment.

- ▶ to UTAM has continued to undertake planned annual audits of its members to insure the integrity of its UPCS product deployment reports, clearing fee payments and its Database Management System.

## **II. UPCS MARKET DEVELOPMENT**

With the UPCS band now in its 6<sup>th</sup> full year of availability for deployment of unlicensed devices, the market for products that operate in this band continues to grow and illustrate all the signs of success. The use of these varied devices is no longer a novelty and has become the normal way of doing business. Literally every industry, including education and health care, have made unlicensed wireless communication a part of their everyday lives. The productivity and customer service that is provided by these systems have made them a competitive necessity. Like cordless and cellular phones, UPCS wireless devices are becoming commonplace and have become an inherent component of many new installations of enterprise based communications solutions.

Each year has also witnessed the entry of additional manufacturers into the market providing end users with a wider choice of products, products with enhanced features and application, and as a result of more competition, end users are also witnessing falling prices. The technology also continues to advance as manufacturers begin introducing second and third generation products.

As the technology continues to become less expensive, in addition to its growth in the number of systems deployed, the market is also witnessing larger scale deployments

of the technology. In the early stages of the market, end users would typically provide wireless coverage within a building or confined area. More and more, the norm is to provide coverage throughout multiple buildings. As in every year since the unlicensed band has been available, 2000 will once again show significant growth.

### **III. DEPLOYMENT ACTIVITIES**

#### **A. Deployment Procedures**

As stated in previous reports, UTAM is pleased that the procedures developed and refined to facilitate the deployment of UPCS devices continue to be effective and are being readily adhered to by manufacturers. In an ongoing effort to effectively streamline its operations and to respond to suggestions made by participating manufacturers and others, UTAM will continue to evaluate and refine these procedures, as needed. To date, the lack of any interference incidents with microwave incumbents attests to the quality of the processes and the adherence to them by the manufacturers.

Since UTAM filed its last report with the Commission, the UTAM Database Management System (DBMS) continues to perform as designed. It has also been made available to members via an Internet interface. Members are complying with the requirements set forth in the Subscriber Agreement to update the DBMS when products are sold and installed, which allows UTAM to monitor market development, aggregate power generation and to ensure compliance with pre-designated power limits set for Zone 1 counties. In addition, UTAM members also have been using the DBMS as part of the pre-sales process to determine whether a particular customer's location is in a Zone 1 or Zone 2 county.

Also, as specified in the Subscriber Agreement, UTAM, through an independent third party, continues to audit its subscriber members deployment records to ensure that UTAM's records accurately track product deployments, thereby ensuring the integrity of the DBMS. This audit is intended to ensure that the database monitoring mechanisms are operating as intended and that the proper clearing fees are paid. To date, no major discrepancies have been observed.

#### **B. Prior Coordination Notice ("PCN") Procedure**

As noted in earlier reports to the Commission, UTAM has classified each county in the United States based upon a two-zone classification system. Zone 1 counties are those counties distant from existing microwave operations which permit deployment of UPCS products up to a pre-determined and "pre-coordinated" power limit. In contrast, Zone 2 counties have existing microwave operations either nearby or in the county and, as a result, UPCS product deployments cannot occur within such a county until a site-specific coordination has been successfully completed. There are also 1,225 Isochronous and 1,244 Asynchronous Zone 2 counties that UTAM has classified as "non-scheduled". These counties qualify for a pre-coordinated Zone 1 status, however, their business population is typically less than 5,000 and therefore have not been scheduled for conversion at this time. These counties are automatically converted by UTAM, via the PCN process, when any subscriber files for a site specific coordination in that county.

Through the course of the first half of 2000, UTAM, through its Prime Frequency Coordinator, Comsearch, has issued a total of 42 PCNs for Zone 1 candidate counties,

bringing the total number of Zone 1 counties in the 1920 - 1930 MHz Isochronous band to 1,686, or 54% of the counties in the U.S. When the qualified Zone 2 “non-scheduled” counties are considered, 93% of the counties would qualify as Zone 1. In the 1910 - 1920 GHz Asynchronous band, the total number of Zone 1 counties has increased from 1,390 in UTAM’s last report to the Commission, to 1,425, or 45% of the counties in the U.S. When the qualified Zone 2 “non-scheduled” counties are considered, 85% of the counties are available for unencumbered deployment in this band. A Zone 1 PCN notifies affected microwave incumbents that UTAM has declared a county to be a Zone 1 candidate and that the county will be "pre-coordinated" for a particular power level as determined in accordance with current TIA Bulletin 10 guidelines.

### **C. Product Deployment**

Also, as in past reporting periods, product deployment continues to grow at a healthy pace. Quarter-over-quarter product deployments continue to demonstrate a healthy growth curve in a developing market. As chartered, UTAM will continue to coordinate the deployment of these unlicensed devices and to collect the associated clearing fees. As more fully detailed in the UTAM Plan filed with the Commission, UTAM will use these fees to finance the relocation of microwave incumbents from the spectrum allocated to UPCS.

## **IV. RELOCATION ACTIVITIES**

The continued successful growth of the UPCS market ultimately depends on the full clearing of the UPCS band. If one looks at the growth of the market over time, there

is a strong correlation with the availability of Zone 1 counties. While the complete clearing will still take a few more years, UTAM has taken steps that will both facilitate ease of deployment and accelerate the clearing process. As mentioned in earlier reports, UTAM has undertaken a regional clearing strategy to facilitate the conversion of the remaining Zone 2 counties. By taking this approach, UTAM will open up large contiguous areas of the country for unencumbered product deployment. UTAM's initial focus was in the Northeast region which, with the exception of a few small, sparsely populated counties, is now clear. UTAM's most recent focus has been on the Southeast region, which to date is now over 98% clear. After completing the Southeast region UTAM will begin to focus on the Midwest region. In the course of this effort, UTAM has submitted Prior Coordination Notices to the Microwave Clearinghouses consistent with its obligation under the FCC Microwave Relocation Cost Sharing rules. In doing so, it has initiated obligations consistent with the rules.

As mentioned in the last report to the Commission, UTAM, in an effort to accelerate the clearing process, has entered into a comprehensive cost sharing agreement with the PCIA Clearinghouse and its members. Under the agreement, UTAM will share the costs of relocated microwave links with the PCS carriers responsible for their relocation and as a result, UTAM has reclassified over 220 Zone 2 counties to Zone 1 status, many of which contain major metropolitan areas. Recently, UTAM and the PCIA Clearinghouse have extended that agreement to include AT&T Wireless which contributes to the accelerated clearing. It is anticipated that this accelerated clearing effort will contribute to the continued growth of the UPCS market, and in turn, generate accelerated clearing fees that will be applied, in part, to the costs incurred under the cost

sharing agreement and increase the potential for opening up the UPCS band to nomadic devices

## **V. OPERATIONAL, ORGANIZATIONAL AND FINANCIAL STATUS**

### **A. Operational Status**

UTAM continues to successfully use the operational procedures that it put in place to oversee the deployment of UPCS devices and coordinate deployment with incumbent microwave systems. UTAM will continue to evaluate these processes and refine them as necessary.

As a result of its ongoing evaluation of these procedures, plus feedback from its members, UTAM has recently completed the upgrade of its database and information systems to make them accessible via the Internet.

### **B. Membership and Staffing**

The voting membership currently consists of Alcatel USA, ASCOM Wireless Solutions, Cortelco, CTP Systems, Lucent Technologies, Motorola, Inc., NEC America, Inc., Nitsuko America, Nortel Networks Inc., Siemens Information and Communication Networks, Inc., SpectraLink Corporation, ECI Telecom, Inc and Toshiba. In addition, UTAM also has numerous associate members.<sup>4</sup> Given the ongoing number of inquiries for requirements to operate in the UPCS band, combined with the continued clearing of the UPCS band, UTAM is confident that additional manufacturers and distributors will become voting members in 2000.

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<sup>4</sup> A complete list of UTAM Board of Trustees and Associate Members is attached as

UTAM's subcommittee structure continues to provide the Board of Trustees with additional operational support. Subcommittee membership is open to any interested party, and several member and non-member companies continue to participate actively in this regard.

### **C. Funding**

UTAM has continued to collect clearing fees from the deployment of UPCS products. The actual and forecasted growth in clearing fees resulting from increased deployments indicates that these fees, combined with UTAM's current assets, will keep UTAM in a sound financial position into the foreseeable future.

## **VI. OUTREACH ACTIVITIES**

UTAM has continued its efforts to maintain contacts with other PCS-related industry groups in order to remain current on industry developments. UTAM continues to discuss UTAM's participation in the FCC's cost sharing process with representatives of the PCIA and ITA clearinghouses. As mentioned earlier, UTAM has entered into a cost sharing agreement with the PCIA Clearinghouse and its members in an attempt to accelerate its clearing initiatives and will continue to explore expanding that agreement with others in the future. It has also approached the ITA Clearinghouse with the same intent.

Through its members, UTAM also participates in other industry-wide seminars and trade shows to increase the awareness of the market for UPCS devices. In addition, UTAM continues to answer inquiries regarding its objectives and processes and provides information to interested parties as necessary.

## VII. CONCLUSION

UTAM is once again pleased to report that the framework that has been established for the deployment of unlicensed devices continues to work successfully. The continued growth of UPCS sales, the continued adherence by manufacturers to UTAM's operational processes and UTAM's continued efforts to prevent harmful interference to microwave incumbents indicate that UTAM is maintaining a proper course for fulfilling its overall charter. UTAM will continue to monitor and refine its operations to meet the dynamics of the UPCS market and looks forward to the challenges that lie ahead.

Respectfully Submitted,

UTAM, INC.

By: /s/Sandy Abramson

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President

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July 1, 2000

## APPENDIX A

### **UTAM BOARD OF TRUSTEES AND ASSOCIATE MEMBERS**

#### **VOTING MEMBERS**

Alcatel USA – Ms. Joyce Cruickshank  
ASCOM Wireless Solutions. – Mr. Chad West  
Cortelco – Mr. John Harbor  
CTP Systems – Mr. Mark Giugni \*\*  
Ericsson, Inc. – Ms. Meg Valentio  
Lucent Technologies, Inc. – Ms. Sandy Abramson (*President*) \*\*  
Motorola, Inc. – Mr. Wayne Leland \*\*  
Nitsuko America – Mr. Paul Schaeffer  
NEC America Inc.– Mr. Paul Weismantel (*Vice-President*) \*\*  
Nortel Networks Inc. – Mr. Peter Cassidy (*Treasurer*) \*\*  
Siemens Information and Communication Networks, Inc. – Mr. Peter Kozdon \*\*  
SpectraLink Corporation – Mr. Ben Guderian (*Secretary*) \*\*  
ECI Telecom, Inc. – Mr. John Dabnor \*\*  
Toshiba – Mr. Paul Keith

\*\* Member of the Board of Trustees

#### **UTAM ASSOCIATE MEMBERS**

Bell South Wireless, Inc.	JRC Canada, Inc.
Communications Certification Laboratory	Matsushita
Comsearch	NTT America
Freepoint Telecom	P-Com Network Services
Harris Corporation	Phillips Business Communications
Industrial Telecommunications Association	Redcom Laboratories